

GUSEYNOV, F.M.; GASANOV, T.M.

Acid treatment of well bottom zones. Neftianik 5 no.10:11-12 0 '60.  
(MIRA 13:10)

1. Starshiy geolog promysla No.2 Neftepromyslovogo upravleniya  
Karagandaneft' (for Guseynov). 2. Zaveduyushchiy promyslom No.2  
Neftepromyslovogo upravleniya Karagandaneft' (for Gasanov).  
(Azerbaijan--Oil wells--Acidization)

KULIYEV, A.E.; GUSEYNOV, F.M.

Effect of the size of a roller bit on drilling rate. Azerb.  
neft. khoz. 41 no.6:15-17 Je '62. (MIRA 16:1)  
(Oil well drilling)

GUSEYNOV, F.M.

Some data on the oil pool of the Sub-Kirmaki series in the southern wing of the Lok-Batan field. Azerb.neft.khoz. 41 no.4:10-12 Ap '62.  
(MIRA 16:2)

(Lok-Batan region—Petroleum geology)

GUSEYNOV, F. Sh.

"Investigation of the Stressed State of Drilling Cables Used in Drilling Oil Wells." Cand Tech Sci, Azerbaydzhan Order of Labor Red Banner Industrial Inst imeni M. Azizbekov, Min Higher Education USSR, Baku, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

GADZHIALIBEYLI, D.A.; GUSEYNOV, A.Sh.

Calculating clamp joints. Izv. vys. ucheb. zav.; neft' i gaz 4  
no.3:99-102 '61. (MIRA 16:10)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.

TALYBZADE, R.T.; GASANOV, A.G.; GUSEYNOV, F.Sh.

Magnitude of torque in screwing and unscrewing threaded sucker rod joints. Izv.vys.ucheb.zav.; neft' i gaz 1 no.10:117-119 '58. (MIRA 12:4)

1. Azerbaydzhanskiy industrial'nyy institut imeni M.Azizbekova.  
(Sucker rods)

GUSEYNOV, F.Sh.; GASANOV, A.G.

Development of wire rope construction. Izv. vzb. ucheb. zav.;  
neft' i gaz 3 no.4:133-136 '60. (MIRA 15:6)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.  
(Wire rope)

ALESKEROV, A. (Baku); GUSEYNOV, G. (Baku)

In the Institute of Economics of the Academy of Sciences of  
the Azerbaijan S.S.R. Vop.ekon. no.9:158-159 S '61.

(MIRA 14:8)

(Azerbaijan--Economic research)



GUSEYNOV, G. A.

44-1-318

Translation from: Referativnyy Zhurnal, Matematika, 1957, Nr 1, p. 49 (USSR)

AUTHOR: Guseynov, G. A.

TITLE: On the Approximation of Discontinuous Functions by Generalized Bernshteyn Polynomials (Ob approksimatsii razryvnykh funktsiy obobshchennymi polinomami tipa S. N. Bernshteyna)

PERIODICAL: Tr. Azerb. gos. ped. in-ta, 1955, Nr 2, pp. 133-145

ABSTRACT: A. O. Gel'fond (Izv. AN SSSR, ser. matem., 1950, 44, 413-420) has shown that if:

1) the sequence  $\{\alpha_n\}$  fulfills the conditions:

Card 1/3

$$0 = \alpha_0 < \alpha_1 \leq \alpha_2 \leq \dots \leq \alpha_n \leq \dots, \alpha_n \rightarrow \infty$$

$$\sum_1^{\infty} \alpha_n^{-1} = \infty;$$

44-1-318

On the Approximation of Discontinuous Functions (Cont.)

2.

$$\sigma_{k,n} = \left[ \left(1 - \frac{\alpha_1}{\alpha_{k+1}}\right) \cdots \left(1 - \frac{\alpha_1}{\alpha_n}\right) \right]^{\frac{1}{\alpha_1}}, \quad \sigma_{n,n} = 1$$

$$q_{k,n}(x) = (-1)^{n-k} \frac{\alpha_{k+1} \cdots \alpha_n}{2\pi i} \int_{|z|=1+\alpha_n} \frac{z^2 dz}{(z-\alpha_k) \cdots (z-\alpha_n)} = \sum_{s=0}^k \beta_{s,\mu_s} x^{\alpha_s} \ln^{\mu_s} x$$

$|z|=1+\alpha_n$

$(k=0, 1, \dots, n; \mu_s \leq \mu_s - 1; \mu_s - \text{is a multiple of } \alpha_s)$

3.  $f(x)$  is bounded in the segment  $[0, 1]$  and continuous in  $[a', b']$ .

where  $0 < a < a' < b' < b < 1$ , then the sequence of the Bernshteyn polynomials

$$B_n^{(1)}(f; x) = \sum_{k=0}^n f(\sigma_{k,n}) q_{k,n}(x)$$

uniformly converges toward  $f(x)$  in the segment  $[a, b]$ .

Card 2/3

On the Approximation of Discontinuous Functions (Cont.)

44-1-318

For  $f(x)$ , fulfilling Lipshitz's condition, the velocity of convergence is also determined by Gel'fond. In the reviewed article these statements are extended to the polynomials

$$B_{n,m}^{(1)}(f; x, y) = \sum_{k=0}^n \sum_{l=0}^m f(\xi_{k,n}, \xi_{l,m}) q_{k,n}(x) q_{l,m}(y),$$

not only for continuous functions, but also for some discontinuous functions.

Reviewer's note: Theorem VI is incorrect.

A. F. Ipatov

Card 3/3

Guseynov, G. A.

44-1-319

TRANSLATION FROM: Referativnyy zhurnal, Matematika, 1957, Nr. 1, p. 49. (USSR)

AUTHOR: Guseynov, G. A.

TITLE: On the Approximation of Summable Semi-continuous and Measurable Functions by Generalized Bernstein Polynomials (Ob approksimatsii summiruyemykh polunepreryvnykh i izmerimyykh funktsiy obobshchennymi polinomami tipa S.N. Bernshteyna)

PERIODICAL: Tr. Azerb. gos. ped. in-ta, 1955, 2, pp 163-180

ABSTRACT: From the polynomials  $B_n^{(l)}(f; x) = \sum_{k=0}^n f(a_k) q_{kn}^{(l)}(x)$  of Bernstein type (Referativnyy zhurnal, Matematika, 1957, No 1, 318), three generalized polynomials  $B_n^{(l)}(f; x)$  ( $l=2, 3, 4$ ) are constructed. It is proven that:  $B_n^{(2)} \rightarrow f(x)$  in every Lebesgue point  $f(x)$ , that is, almost everywhere on  $[0, 1]$ ;  $\{B_n^{(2)}\}$  does not increase and on  $[0, 1]$   $B_n^{(3)} \rightarrow f(x)$ ;  $B_n^{(4)} \rightarrow f(x)$  in every point of approximate continuity of  $f(x)$ , that is, almost everywhere on  $[0, 1]$ . In the particular case of  $a_k = k$ , generalized Bernstein polynomials are converted into the corresponding generalized polynomials introduced by

Card 1/2

44-1-319

On the Approximation of Summable Semi-continuous and (Cont.)

L.V. Kantorovich, in a manner similar to the conversion of  $\beta^{(n)}$  into the polynomials of Bernstein. All propositions are extended to functions of two variables.

A.F. Ipatov

Card 2/2

*GUSEV, G.A.,*

GUSEVNOV, G.A.; TAGIROV, G.A.

Hydraulic fracturing of strata developed by the Oil Field Administration of the Siazan' Petroleum Trust. Azerb. neft. khoz. 36 no.5: 27-28 My '57. (MIRA 10:11)

(Siazan' region--Petroleum engineering)

GUSEYNOV, G.A.

Using extended production string filters and stepped cementing  
operations at the Oil Field Administration of the Siazan'  
Petroleum Trust. Azerb.neft.khoz. 37 no.8:14-15 Ag '58.  
(Siazan' District--Oil well cementing) (MIRA 11:11)

GUSEYNOV, G.A.; TAGIROV, G.A.

Formation waters in the Siazan' oil field. Azerb.neft.khoz.  
37 no.10:4-6 0 '58. (MIRA 12:2)  
(Siazan' District--Oil field brines)



ABDULLAYEV, G.K.; GUSEYNOV, G.A.

Lithological and reservoir properties of arenaceous and silt rocks  
in lower Maykop sediments of the Caspian monocline. Azerb. neft.  
khoz. 39 no.7:1-4 J1 '60. (MIRA 13:10)  
(Caspian Sea region--Petroleum geology)

GUSEYNOV, G.A.; ABDULLAYEVA, S.A.; MAGERRAMOV, Sh.A.

Effect of a growth promoting substance of petroleum origin on  
carbohydrate assimilability in the organism. Uch. zap. AGU.

Biol. ser. no. 3:29-36 '60.

(MIRA 14:5)

(Growth promoting substances)

(Carbohydrate metabolism) (Petroleum industry—By-products)

SULTANOV, A.D.; ABDULLAYEV, G.K.; GUSEYNOV, G.A.

Lithological and reservoir characteristics of sand and silt rocks  
in the Maikop series of the Caspian monocline. Izv. AN Azerb. SSR.  
Ser. geol-geog.nauk no.6:71-81 '60. (MIRA 14:3)  
(Caspian Sea region--Rocks, Sedimentary)

DADAYEVA, E.A.; GUSEYNOV, G.A.; PETROVSKIY, V.G.

Efficient production of the Maikop series in the Siagan' field.  
Trudy AgNII DN no.9:229-232 '60. (MIRA 14:5)  
(Siagan' region—Oil fields—Production methods)

ALIFOV, S.K.; GUSEYNOV, G.A.; TAGIROV, G.A.

Excluding of formation waters in the Siazan' oil field. Azerb.  
neft. khoz. 39 no.3(405):35-38 Mr '60. (MIRA 14:9)  
(Siazan' region--Oil field brines)

ABDULLAYEV, G.K.; AGAMALIYEV, I.B.; GUSSEYNOV, G.A.

Efficiency of repeated hydraulic fracturing in fields of the  
Oil Field Administration of the Siazan' Petroleum Trust. Azerb.  
neft. khoz. 40 no.9:26-27 S '61. (MIRA 15:1)  
(Siazan' region--Oil fields--Hydraulic fracturing)

GUSEYNOV, G.A.; SOLOMONOV, B.M.; SHIRINOV, A.M.

Lithologic and reservoir properties of arenaceous silt in the  
Koun series of the Caspian Sea region. Azerb. neft. khoz.

41 no.11:4-6 N '62.

(MIRA 16:2)

(Caspian Sea region—Silt)

AEDULLAYEV, G.K.; GUSEYNOV, M.R.; GUSEYNOV, G.A.

Role of tectonic factors in the formation of oil pools in the  
Caspian Tertiary monocline. Azerb. neft. khoz. 42 no.1:4-6  
Ja '63. (MIRA 16:10)

(Caspian Sea region—Petroleum geology)



SALAYEV, S.G.; GUSEYNOV, G.A.; SOLOMONOV, B.M.

Oligocene and Miocene sediments in the Saadan area of the Caspian  
Tertiary monocline and their oil potential. Dokl. AN Azerb. SSR  
18 no.11:35-40 '62. (MIRA 17:2)

1. Institut geologii AN AzSSR i Neftepromyslovoye upravleniye  
"Siazan'neft'." Predstavleno akademikom AN AzSSR M.V.  
Abramovichem.

SALAYEV, S.G.; GUSEYNOV, G.A.; DOLAZHNOV, B.M.

Lithofacies characteristics and the oil potential of the  
Upper-Cretaceous and Paleogene-Miocene sediments of the  
Caspian tertiary monocline. Izv. AN Azerb. SSR. Ser. geol.-  
geog. nauk i nefti no.2:5-13 '63.

(MIRA 17:10)

GUSEYNOV, G.A.; SOLOMONOV, B.M.

Special features of the geology and development of the Siazan'  
oil field. Nefteprom. delo no.4:3-5 '63. (MIRA 17:8)

1. Neftepromyslovoye upravleniye "Siazan'neft'".

GUSEYNOV, G.A.

Changes in the interoceptive metabolic reflex following the introduction into the body of a growth promoting substance of petroleum origin. Vop. fiziol. 6:104-111 '63.

(MIRA 17:11)

SALAYEV, S.G.; GUSEYNOV, G.A.; ZAKHAROV, N.M.

Further trends in the exploration of the Snokrak horizon in  
the Caspian-Kuba area. Neft' i gaz, no. 7:  
14-18 '63. (MIRA 17:10)

1. Institut geologii AN AzSSR i Neft'promyslovoye upravleniye  
"Siazanneft'".

SALAYEV, S.G.; GUSEYNOV, G.A.; SOLOMONOV, B.M.; FUTKARADZE, A.L.,  
spets. red.; MUSAYEVA, E.B., red.

[Geology and oil and gas potential of the Caspian ternary  
monocline] Geology and oil and gas potential of the  
Caspian ternary monocline] Geologiya i nefteguzonost'  
Prikaspiiskoi tretichnoi monoklinali. Baku, Azerneshr,  
1964. 116 p. (MIRA 17:12)

GUSEYNOV, G.A.; MEKHTIYEV, P.G.

Prospects for finding gas and oil in the Sumgait sediments in the northwestern extension of the Caspian Sea region tertiary monocline. Neftgaz. geol. i geofiz. no.6:46-48 '64.  
(MIRA 17:8)

1. Neftepromyslovoye upravleniye "Siazan'neft'".

SALAZEV, S.G.; GUSEYNOV, G.A.; SOLOMONOV, B.M.

Tectonic characteristics of the Caspian Tertiary monocline  
in the light of new data. Izv. AN Azerb. SSR. Ser. geol.-  
geog. nauk no.3:17-24 '65. (MIRA 18:9)



KARAYEV, A.I.; ALIYEV, R.K.; GUSEYNOV, G.; GASANOV, G.

Effect of various preparations made from ripe sumac fruit on the  
tolerance of the organism to carbohydrates. Izv. AN Azerb. SSR  
no. 9:47-59 S154. (MIRA 8:11)  
(Carbohydrates in the body) (Sumac)

GUSEYNOV, G.A.

**V** Changes of the carbohydrate tolerance of organism during the parallel administration of an aqueous extract of ripe fruits of sumac. A. I. Karaev, R. K. Aliev, G. A. Guseynov, and O. Gasanov. *Doklady Akad. Nauk Azerbaidz. S.S.R.* 10, No. 3, 183-86 (1954); *Referat. Zhur., Khim.* 1954, No. 43410. Ripe fruits of sumac, *Rhus coriaria*, contain different alkaloids, tannins, sugars, lipides, resins, essential oils, org. acids, and vitamin C. A 10% aq. ext. of the fruits was fed to exptl. rabbits during 10 days in the amt. of 5 ml. ext./kg. body wt., followed by the daily detn. of the blood sugar (I). The animals received 30% glucose (II) soln. before and after the 5th and 10th addn. of the ext., and 10 days following the ext. addn., resp., in the amt. of 3 g. II/kg. body wt. At the 5th day following the addn. of sumac ext. the amt. of I in blood decreased 17-83 mg. %. The tolerance of the organism toward II increased, and the effect was still noticed 10 days after the ext. addn. The assimilation of sugar is greater when II is supplied together with the sumac ext. B. Wierbicki

MD

(3)

KARAYEV, A.I.; ALIYEV, R.K.; GUSEYNOV, G.A.; GASANOV, G.

Effect of extracts from certain plants in Azerbaijan on carbohydrate tolerance of the organism. Izv. AN Azerb. SSE. no. 9:63-72 S '55. (MLRA 9:1)

(Azerbaijan--Botany, Medical)

GUSEYNOV, G.A.

✓Interoceptors and metabolism. XXX. Effect of stimulation of chemoreceptors of the uterus on blood sugar content. A. I. Karaev and G. A. Guseynov. Doklady Akad. Nauk Azerbaidzhan. S.S.R. 11, No. 4, 285-82(1955)(in Russian; Azerbaidzhan summary, 202-4); cf. C.A. 50, 5131c.—Stimulation of the chemoreceptors of the uterus with acetylcholine increases the blood sugar by some 500%; stimulation with 0.04% glucose gives a slight sugar level increase as does that with 0.4% glucose. Stimulation with adrenaline greatly increases the blood sugar level. Pretreatment with procaine blocks the action of acetylcholine and adrenaline (cf. C.A. 49, 14003a). G. M. K.

MD

KARAYEV, A.I.; GUSEYNOV, G.A.; DADASHEV, A.G.

Effect of the stimulation of mechanoreceptors of the small intestine  
on the glycogen, sugar, and lactic acid content of blood. Uch.zap.

AGU no.3:51-57 '56.

(MLRA 10:4)

(Intestines--Innervation) (Blood--Analysis and chemistry)

(Carbohydrate metabolism)

GUSEYNOV, G. A.

✓ Some pharmacological properties of Shiraz mineral water.  
A. I. Karayev, P. E. Akhmedov, G. B. Allahverdiyev, and  
G. A. Guseynov. *Izv. Akad. Nauk Azerbaidzhan. Ser. R.*  
1956, No. 5, 95-101 (Russian summary: 104-6). Mineral  
water from Shiraz (I) is ferruginous, calc. bicarbonates of  
Ca and Mg. The administration to rabbits of a 3-day solu-  
tion of blood vessels of the ear, increases tonicity of cardiac  
muscles, and in a short time reduces blood pressure. Pro-  
longed application of 10 drops of 1% solution of benzoin oil  
to rabbit nasal, and stimulates action of blood-producing  
organs. M. Chucmanian

4

KARAYEV, A.I.; ALIYEV, R.K.; GUSEYNOV, G.A.; DADASHEV, A.G.

Effect of some mineral substances on the tolerance of the organism  
to carbohydrates [in Azerbaijani with summary in Russian]. Izv.AN  
Azerb.SSR no.11:69-82 '56. (MLRA 10:2)  
(Carbohydrates in the body)

KARAYEV, A.I.; GUSEYNOV, G.A.

Effect of renal chemoreceptor stimulation on the carbohydrate  
content of blood. Uch.zap.AGU no.8:55-62 '57 (MIRA 11:11)

(KIDNEYS--INNERVATION) (CARBOHYDRATE METABOLISM)



*GUSEYNOV, G.A.*

GARAYEV, A.I.; GUSEYNOV, G.A.; DYADASHNEV, A.D.

Part of the vegetative nervous system in unconditioned interoceptive exchange reflexes from the stomach [in Azerbaijani with summary in Russian]. Izv. AN Azerb.SSR no. 121-131 S '67. (MIRA 10:9)  
(STOMACH--INNERVATION) (NERVOUS SYSTEM, SYMPATHETIC) (BLOOD SUGAR)

KARAYEV, A.I.; GUSEYNOV, G.A.

Effect of the stimulation of chemoreceptors of the kidney on the urea  
content of the blood. Uch.zap.AGU no.5:65-73 ' 58. (MIRA 12:1)

(KIDNEYS--INNERVATION)

(BLOOD--ANALYSIS AND CHEMISTRY)

KARAYEV, A.I.; GUSEYNOV, G.A.

Effect of the stimulation of chemoreceptors of kidneys on the activity  
of prothrombin of blood. Uch. zap. AGU. Biol. ser. no.3:49-56 '59.  
(MIRA 15:5)

(PROTHROMBIN)

(KIDNEYS)

KARAYEV, A. I., (GUSEYNOV, G. A.

Effect of stimulation of the chemoreceptors of the spleen on the  
urea content of the blood. Dokl. AN Azerb. SSR 16 no. 5:515-517 '60.  
(MIRA 13:8)

(~~SPLEEN~~—INNervation) (UREA)

1.0.1.1, 1.0.1.2.

"Data on the Influence of the Central Nervous System on the Rate of Blood Regeneration After Heavy Loss of Blood." Cand Med Sci, Moscow Medical Stomatological Inst, 3 Mar 54. Dissertation (editsinskiy rabotnik Moscow, 12 Feb 54)

See: SSM 176, 18 Aug 1954.

GUSEYNOV, G.A.

Changes in the composition of blood in normal animals caused by  
the Darydag arsenous water and arsenic solution (in Azerbaijani  
with summary in Russian). Uch. zap. AGU no.11:35-47 '56.  
(DARYDAG--MINERAL WATERS) (ARSENIC) (MLRA 10:4)  
(BLOOD--ANALYSIS AND CHEMISTRY)

GUSHYNOV, G.A.

Significance of drug-induced sleep in the restoration of quantity and morphological composition of blood in animals after bleeding.  
Biul. eksp. biol. i med. 41 no.1:30-33 Ja. '56 (MLRA 9:5)

1. Iz kafedry patologicheskoy fiziologii (sav.-prof. N.A. Fedorov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. dotsent G.N. Beletskiy) Predstavleno deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(SLEEP, eff.

on restoration of quantity & morphol. conte composition of blood in animals after blood loss)

(BLOOD

quantity & morphol. composition, eff. of sleep on restoration after blood loss in animals)

GUSEYNOV, G.A.

~~Changes~~ induced by the arsenous waters of Darydag and arsenic solution  
in the blood composition of anemized animals [in Azerbaijani with  
summary in Russian]. Uch. zap. AGU no.1:85-98 '57. (MIRA 10:12)  
(DARYDAG--MINERAL WATERS) (ARSENIC--PHYSIOLOGICAL EFFECT)  
(BLOOD--ANALYSIS AND CHEMISTRY)



USSR/Human and Animal Physiology (Normal and Pathological)  
Blood. General Problems.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26394

Author : Guseynov, G.A.

Inst : Azerbaydzhan Scientific Research Institute of Blood  
Transfusion

Title : Blood Restoration After Loss of Blood Under Conditions of  
Neurodystrophy in Animals.

Orig Pub : Sb. nauchn. tr. Azerb. n.-1. in-ta perelivaniya krovi,  
1957, vyp. 2, 76-80

Abstract : In a rabbit (R) 40-43% of the entire volume of circulat-  
ing blood was extracted in two stages with an interval of  
24 hours with the aid of heart puncture and vacuum-pump  
(from the ear). Neurodystrophy was induced by unilateral  
dissection of the sciatic nerve with introduction of 1-2

Card 1/2

- 33 -

USSR/Human and Animal Physiology (Normal and Pathological)  
Blood. General Problems.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26394

drops of 10% formalin into its central segment. In con-  
trol rabbits, a sharp decrease of the number of erythro-  
cytes (E), Hb and blood volume with subsequent restora-  
tion by the 20-22 day was noted after blood letting.  
The number of leucocytes, after a decrease from 7.2 to  
5.7 thousand, increased to 10 thousand. In R with tran-  
sected sciatic nerve, on 7-8th day after surgery trophic  
ulcers developed on the hind extremity. Surgery per se  
did not conditioned a considerably decrease of blood in-  
dexes. The number of L increased from 7 to 9 thousand.  
R reacted seriously to blood letting, 4R perished. The  
restoration of blood indexes took a course analogous to  
restoration in the control series, but was prolonged to  
36 days. The amount of Hb and L changed in a wave-like  
manner. In all surviving experimental rabbits, leucopenia  
and decrease of circulating blood volume were observed  
for a long time. -- I.I. Yurovskaya

Card 2/2

*GUSEYNOV, G.A.*  
GUSEYNOV, G.A.

Changes in the composition of blood induced by the arsenous waters of Darydag and arsenic solution in animals following anemization by phenylhydrazine poisoning [in Azerbaijani with summary in Russian].  
Uch. zap. AGU no.5:63-77 '57. (MIRA 11:1)  
(ANEMIA) (DARYDAG--MINERAL WATERS) (ARSENIC--THERAPEUTIC USE)

GUSEYHOV, G.A.; ABDULLAYEV, S.A.; MEGERLANOV, Sh.A.

Effect of growth substances of petroleum origin on the regeneration of  
blood in animals. Uch. zap. AGU. Biol. ser. no.6:57-65 '59.

(MIRA 15:5)

(GROWTH PROMOTING SUBSTANCES) (BLOOD)

ALIZADE, F.M.; GUSEYNOV, G.A.; ALHSKEROV, G.S.

Use of vitamin E for desensitisation in the pathology of pregnancy  
connected with Rh incompatibility of the fetal and maternal blood.

Azerb.med.zhur. no.2:28-32 F '60.

(MIRA 13:5)

(TOCOPHEROL)

(RH FACTOR)

(PREGNANCY, COMPLICATIONS OF)

GAIBOV, T.D., dotsent; GUSEYNOV, G.A.; RZAYEV, N.A.

Inclusion of the proteins of transfused blood tagged with  $s^{35}$  methionine in to the proteins of various organs and tissues.  
Azerb. med. zhur. no. 10:3-7 0 '60. (MIRA 13:10)

1. Iz biokhimicheskoy laboratorii (rukovoditel' - starshiy nauchnyy sotrudnik N.A. Rzayev) Azerbaydzhanskogo nauchno-issledovatel'skogo instituta gematologii i perelivaniya Krovi (direktor - dotsent G.A. Guseynov).  
(PROTEIN METABOLISM) (METHIONINE)

RAZAYEV, N.A.; GAIBOV, T.D.; GUSEYNOV, G.A. (Baku)

Changes in the amino acid content of the blood of patients after  
blood transfusion. Pat. fiziol. i eksp. terap. 4 no. 5:16-19  
S-O '60. (MIRA 13:12)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo instituta  
gematologii i perelivaniya krovi.  
(BLOOD—TRANSFUSION) (AMINO ACIDS)

RZAYEV, N.A.; GAIBOV, T.D.; GUSEYNOV, G.A.

Some data on the assimilation by the body of protein hydrolysate products. Probl.gemat.i perel.krovi no.11:41-47 '61.

(MIRA 15:1)

1. Iz biokhimicheskoy laboratorii (zav. N.A. Rzeyev) Azerbaydzhanskogo nauchno-issledovatel'skogo instituta gematologii i perelivaniya krovi (dir. - dotsent G.A. Guseynov).

(PROTEIN METABOLISM)

GUSEYNOV, G.A.; DAPA, M., P.L.; GANOV, P.L.; KALIN, N.A.; P. 194, G.L.;  
MOVSEYEV, S.M.

Effectiveness of the use of specific gamma-globulins in burn  
sickness; preliminary report. Izvbl. gemat. i perel. krovi 9  
no.4:42-43 Ap '64.

(MFA 17:11)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut gemato-  
logii i perelivaniya krovi (dir. - dotsent G.A. Guseynov); Baku.



GUSEYNOV, G.A.; KASIMOV, G.I.; RZAYEV, N.A.; AKHUNDOVA, A.M.; TERMKRITYCHEVA,  
O.Kh.; FROLOVA, K.G.

Use of plastic bags for the storage and transfusion of preserved  
blood. Probl. gemat. i perel. Krovi 8 no.9:18-19 S '63.

(MIRA 17:9)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo instituta  
gematologii i perelivaniya krovi (dir. - dotsent G.A.Guseynov).

GUSEYNOV, G.A.; NASIROVA, R.A.

Effect of onion and garlic phytoncides on the phagocytic activity  
of leucocytes. (in Azerbaijani with summary in Russian).

Uch. zap. AGU. Biol. ser. no.6:49-53 '60.

(Phytoncides)

(Phagocytosis)

SARIKYAN, S.Ya.; DUKHANINA, N.N.; GUSEYNOV, G.A.

Scientific Conference of the Institutes of Malaria and Medical Parasitology  
of the Ministry of Public Health of the U.S.S.R. and the Union Republics.  
Med.paraz.i paraz.bol. no.4:372-376 J1-Ag '53. (MLRA 6:9)  
(Malarial fever) (Parasites)

GKFTER, V.A.; GUSEYNOV, G.A.

Mass experiment in dehelminthization for ascariasis with oil of chenopodium in combination with santonin. Med.paraz.i paraz.bol. no.5:408-410 S-0 '53.  
(MIRA 6:12)

1. Iz gel'mintologicheskogo otdela Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (direktor instituta professor P.G.Sergiyev, zaveduyushchiy gel'mintologicheskim otdelom - professor V.P.Pod'yapol'skaya).

(Worms, Intestinal and parasitic) (Chenopodium oil) (Santonin)

POD"YAPOL'SKAYA, V.P.; VINOGRADSKAYA, O.N.; ZASUKHIN, D.N.; GUSEYNOV, G.A.  
[reviewers]; GELLER, E.R.; KALASHNIKOVA, A.P. [authors].

"General Biology." E.R.Geller, A.P.Kalashnikova. Reviewed by V.P.  
Pod"iapol'skaia, O.N.Vinogradskaja, D.N.Zasukhin, G.A.Guseinov. Med.  
paras.i paras.bol. no.5:474-476 S-O '53. (MIRA 6:12)  
(Biology) (Geller, E.R.) (Kalashnikova, A.P.)

GUSEYNOV, G. A.

"Experimental and Clinical Ascariidosis Therapy." Cand Med Sci, All-Union  
Inst of Helminthology imeni K. I. Skryabin, Min Agriculture USSR, 1954. (KL, No  
1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

LEYKINA, Ye.S.; GUSEYNOV, G.A.

Using serological reactions for determining the time of  
infection by ascariasis. Med.paraz.i paraz.bol. no.1:79-83  
Ja-Mr '54. (MLRA 7:3)

1. Iz sektora gel'mintologii Instituta malyarii, meditsinskoy  
parazitologii i gel'mintologii Ministerstva zdravookhraneniya  
SSSR (direktor instituta - professor P.G.Sergiyev, zaveduyushchiy  
sektorom - professor V.P.Pod'yapol'skaya).  
(Worms, Intestinal and parasitic) (Serum diagnosis)

GUSEYNOV, G.A.

Effectiveness of treating ascariasis with santonin prepared from  
Artemisia transiliensis. Med. paraz. i paraz. bol. no. 4:306-308  
O-D '54. (MLRA 8:2)

1. Iz klinicheskogo sektora Instituta malyarii, meditsinskoy  
parasitologii i gel'mentologii Ministerstva zdoravookhraneniya SSSR  
(dir. instituta prof. P.G.Sergiyev, sav. klinicheskim sektorom prof.  
N.N.Plotnikov)

(ANTHELMINTHICS, therapeutic use,  
santonin in ascariasis)  
(ASCARIASIS, therapy,  
santonin)



EXCERPTA MEDICA Sec 7 Vol 10/8 Pediatrics Aug 56

1712. GUSEYNOFF G.A. • Treatment of ascariasis with oxygen (Russian text) SOVETSK. MED. 1954, 12 (34-36) Tables 1  
One hundred cases, mostly adult, were treated; 50 of them received oxygen once and 50 on 2 successive days. The result was somewhat better in the latter group. Of the 100 patients 79 were completely cured, some of them had received various anthelmintic drugs without success earlier. The dosage of oxygen was for children of one year (1 patient) 200 ml.; 2-3 yr. (1 patient) 250-300 ml.; 4-5 yr. 350-400 ml.; 5-6 yr. (1 patient) 450-500 ml. Later for every year of age 100 ml. more, for adults 1,500-2,000 ml. and for people older than 50 yr. 1,000-1,200 ml. Oxygen is introduced on an empty stomach by a gastric tube 250-300 ml. every 1-2 min.; in small children 50 ml. every 2-3 min. A cleansing enema in the evening is not absolutely necessary; it was given to only 78 patients. After the application of oxygen the patient should rest for 2-3 hr. Later he can resume work. Afterwards a cleansing enema is necessary only if there is no spontaneous motion. Slight side-effects were noted in 8 cases - in 7 mild epigastric pains of short duration and in one nausea and return of the gas. With more care even these small side-effects became extremely rare.

Najman - Zagreb (XX, 7, 6)

GUSEVNOV, G.A.

Treatment of ascariasis with santonin. *Pediatrics*, no.6:28-30 N-D  
'55. (MIRA 9:6)

1. Iz klinicheskogo sektora Instituta malyarii, meditsinskoy  
parazitologii i gel'mintologii (dir.-prof. P.G. Sergiyev, zav.  
klinicheskim sektorom-prof. N.N. Plotnikov) Ministerstva zdravookhran-  
eniya SSSR.

(ASCARIASIS, ther.  
santonin)

(ANTHELMINTHICS, ther. use  
santonin, in ascariasis)

GUSEYNOV, G.A.; TUAYEV, S.M.; DAVYDOVA, M.A.

Effectiveness of compound treatment of ankylostomiasis. Azerb.  
med.zhur. no.8:37-41 Ag '59. (MIRA 12:11)  
(HOOKWORM DISEASE)

LEYKINA, Ye.S.; GUSEYNOV, G.A.; KOTOVA, Z.N.; SHUMKOV, M.A.; DAVYDOVA, M.A.;  
MAMEDOV, N.A.; TUAYEV, S.M.

Epidemiological characteristics of ancylostomiasis in two villages  
in Lenkoran District. Med.paraz. i paraz.bol. 28 no.4:387-394 '59.  
(MIRA 12:12)

1. Iz sektora eksperimental'noy parazitologii Instituta malyarii,  
meditsinskoy parazitologii i gel'mintologii Ministerstva zdavookh-  
raneniya SSSR (dir. - instituta - prof. P.G. Sergiyev, zav. sektorom  
- prof. V.P. Pod'yapol'skaya) i iz gel'mintologicheskogo otdela Insti-  
tuta malyarii i meditsinskoy parazitologii Ministerstva zdavookhra-  
neniya Azerbaydzhanskoy SSR (dir. instituta A.K. Kasimov, zav. otelom  
G.A. Guseynov).

(HOOKWORM INFECTION epidemiology)

LEYKINA, Ye.S.; KOTOVA, Z.N.; GUSEYNOV, G.A.; MAMEDOV, N.I.

Materials on the epidemiology and clinical aspects of ancylostomiasis in Lenkoran' District of the Azerbaidzhan S.S.R. Part 2: Experimental data on the development and survival of the larvae of *Necator americanus* in the soil. Med.paraz.i paraz.bol. 29 no.2:161-168 '60.  
(MIRA 13:12)

(LENKORAN' DISTRICT—HOOKWORMS)

SALAYEV, S.G.; GUSEYNOV, G.A.; SOLOMONOV, B.M.

Oil potential of the Koun series of the Caspian Tertiary monocline.  
Uch. zap. AGU. Ser. geol. -- geog. nauk no.3:71-78 '63. (MIRA 17:11)

GUSEYNOV, G.A.; MAMEDOV, N.I.

Results of the initial tests of green oil and substance R in the eradication of *Ancylostoma* eggs and larvae; preliminary report. Med.para.i paraz.bol. no.3:314-316 '62. (MIRA 15:9)

1. Iz Instituta malyarii i meditsinskoy parazitologii (dir. A.A. Kasimov) Ministerstva zdravookhraneniya Azerbaydzhanskoy SSR.

(HOOKWORM DISEASE) (PETROLEUM PRODUCTS—THERAPEUTIC USE)

PIRUMOV, Kh.N.; GUSEYNOV, G.A.

Control of parasitic and some other diseases in the Republic  
of Guinea. Med. paraz. i paraz. bol. 32 no.5:606-610 S-0'63  
(MIRA 16:12)



KARAYEV, I.I.; GUMENOV, G.A.; ABULAYEVA, S.

Interceptive metabolic reflexes after the use of a growth stimulant  
of petroleum origin against the background of a changed functional  
state of the reticular formation of the brainstem. Trudy Sekt.fiziol.  
AN Azerb.SSR 7:71-87 '63. (MIRA 17-10)

GUSEYNGOV, G.A.

Interceptive metabolic reflexes from rectal receptors under the influence of caffeine in animals after the administration of a growth stimulant of petroleum origin. Trudy Sekt.fiziol.AN Azerb. SSR 7:164-177 '63. (MIRA 17:10)

*Guseynov, G. D.*

82543

24.7700

S/181/60/002/007/020/042  
B006/B070

AUTHORS: Akhundov, G. A., Abdullayev, G. B., Guseynov, G. D.  
TITLE: Some Properties of Single Crystals of Thallium Selenide  
PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 7, pp. 1518-1521

TEXT: In the introduction, the authors discuss results already available in publications on the investigation of thallium selenide semiconductors. In the present work, the method of preparation of single crystals of TlSe is discussed, and the results of investigation of the electrical properties of such crystals are given. For the preparation of single crystals, 99.989% pure thallium and 99.994% pure selenium were used (total weight: 90 gm). TlSe was obtained in evacuated ( $10^{-4}$  torr) quartz ampoules at 500°C in six hours. An X-ray analysis showed that the TlSe had crystallized in tetragonal form with the parameters  $a = 8.02$  and  $c = 7.00$  Å. The single crystals were obtained by zonal fusing. Fig. 2 shows the photograph of such a crystal in the form of a bar 15 cm long and 1.5 cm in diameter. Fig. 1 shows a Laue diagram obtained after seven

Card 1/3

82543

Some Properties of Single Crystals of  
Thallium Selenide

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B006/B070

zonal fusions with a horizontal zone shift of 10 mm/hour. Identical crystals were obtained by a zone shift of 6 mm/hour. For horizontal as well as for vertical zone shift the (001) plane was the plane of growth. The electrical conductivity and the Hall effect were investigated for a TlSe parallelepipedon of 3 . 4 . 15 mm<sup>3</sup>. Fig. 3 shows the measured temperature dependence of the electrical conductivity  $\sigma$  for four samples, whose resistivities at 20°C were 1, 3.2, 3.5, and 49 ohm.cm. It is found that the  $\sigma$  of low-resistivity samples first falls with lowering of temperature, then goes through a maximum, and again increases. The larger the resistivity, the lower is the temperature of transition from metallic to the semiconductor state. The minima of the low-resistivity samples lie at 195, 165, and 120°C (curves 1, 2, 3). The pure sample 4 has no minimum. The activation energy of this sample was determined to be 0.56 ev. Fig. 4 shows the temperature dependence of the electrical conductivity, the carrier concentration, and the carrier mobility of sample 3. It appears that the decrease of  $\sigma$  with increase in temperature up to the temperature of transition may be explained as being due to a decrease of the carrier mobility. In this range, the carrier concentration remains nearly

Card 2/3

Some Properties of Single Crystals of  
Thallium Selenide

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B006/B070

constant. Above the transition temperature,  $\sigma$  increases because of the growth of the hole concentration. For the whole range of temperatures, the conductivity is of p-type. The thermo-emf was determined to be  $\sim 400 \mu\text{V}/^\circ\text{C}$ . There are 4 figures and 5 references: 3 Soviet, 1 US, and 1 German.

ASSOCIATION: Institut fiziki AN AzSSR Baku (Institute of Physics of  
the AS Azerbaydzhanskaya SSR, Baku) 4

SUBMITTED: February 2, 1960 (after revision)

Card 3/3

26.2532  
24,7700

S/181/62/004/005/019/055  
B125/B104

AUTHORS: Guseynov, G. D., Akhundov, G. A., and Abdullayev, G. B.

TITLE: Electrical and thermoelectrical properties of TlSe single crystals

PERIODICAL: Fizika tverdogo tela, v. 4, no. 5, 1962, 1206-1212

TEXT: Electrical conductivity, Hall effect, and thermo-emf of TlSe single crystals in the range 80-570°K were measured by a d-c compensation method. Electrical conductivity and Hall effect were measured with molybdenum probes, and the thermo-emf with the copper branches of thermocouples. The probes and thermocouples were contained in an externally cooled, evacuated glass tube ( $10^{-3}$  mm Hg) with inserted quartz tube. The Hall emf measured in fields of 1,800-10,000 oe varied from 0.02 to 13 mv. Figs. 4a and 4b show the measured temperature dependence of electrical conductivity and Hall effect in the range 80-570°K for specimens of 1,4,28,130, and 1700 ohm-cm at 20°C (curves 1-5). In these specimens, intrinsic conductance arises at 240, 180, 60, -35, and -65°C. Below these temperatures, specimens 1-3 behave like metals, whereas 4 and 5 behave like

Card (1/4)

Electrical and thermoelectrical ...

S/161/62/004/005/019/055  
B125/B104

semiconductors over the entire temperature range. The temperature dependence of electrical conductivity is chiefly determined by the carrier concentration. With rising temperature the Hall constant  $R$  decreases sharply in the range of intrinsic conductance without losing its positive sign. The forbidden-band widths determined from the temperature dependence of conductivity and Hall constant are similar for the specimen with the highest resistivity. The Hall mobility  $\mu$  of specimens 1-4, determined by simultaneous measurement of  $\sigma$  and  $R$ , reaches a maximum at  $\sim 100^\circ\text{K}$  and decreases as  $\mu \propto T^{-3/2}$  with rising temperature. The Hall mobility of specimen 5 decreases monotonely as the temperature rises from 100 to  $570^\circ\text{K}$ . The absolute value of the emf  $\alpha$  decreases in the range of intrinsic conductance with rising temperature. From  $170^\circ\text{K}$  downward  $\alpha$  rapidly increases with decreasing temperature. This abnormal increase in the specimens with the highest resistivities indicates the entrainment of carriers by phonons. The effective carrier masses were calculated from  $\alpha$  and  $R$  and found to be  $m_n^* = 0.3 m_0$  and  $m_p^* = 0.6 m_0$ . The temperature dependence of the forbidden-band width (in eV) is given by  $\Delta E = 0.57 - 3.9 \cdot 10^{-4} T$ . There are 6 figures. The most important English-language reference is: P. Fielding, G. Fisher and E. Mooser. J. Phys. Chem. Card 2/4 3

Electrical and thermoelectrical ...

S/181/62/004/005/019/055  
B125/B104

Sol., 8, 434, 1959.

ASSOCIATION: Institut fiziki AN AzSSR, Baku (Institute of Physics AS  
AzSSR, Baku)

SUBMITTED: November 9, 1961 (initially)  
December 25, 1961 (after revision).

Fig. 4: Temperature dependence of electrical conductivity (a) and Hall constant (b) for TlSe single crystals.

Fig. 4a



Card 3/4 - 3



Study of monocrystalline n-TlSe and its rectifying properties.  
G. A. Akhundov, G. B. Abdulayev, I. G. Aksianov.

(Not presented).]

Electro-physical properties of monocrystalline TlSe. G. A. Akhundov,  
G. B. Abdulayev, G. D. Guseynov, N. Kh. Aliyeva.

[Investigation of the electrical properties of germanium telluride.  
G. B. Abdulayev, V. B. Antonov, Ya. N. Nasirov.

On studies of and some properties of monocrystalline GaTe and GaS.  
G. A. Akhundov, G. B. Abdulayev, N. A. Gasanova, F. I. Ismailov.

[Investigation of some physical properties of the monocrystalline  
compounds  $\text{CuSbS}_2$  and  $\text{CuSbSe}_2$ . G. B. Abdulayev, R. Kh. Nani, Ya. N.  
Nasirov, T. G. Osmanov.

Report presented at the 3rd National Conference on Semiconductor Compounds,  
Kishinev, 16-21 Sept 1963

ACCESSION NR: AP4012596

S/0233/63/000/005/0051/0054

AUTHOR: Guseynov, G.D.

TITLE: Automatic recording of electric conductivity, the Hall effect, and thermal emf in semiconductors

SOURCE: AN AzerbSSR. Izv. Ser. fiz.-matem. i tekhn. nauk, no. 5, 1963, 51-54

TOPIC TAGS: automatic recording, electric conductivity, Hall effect, thermal emf, semiconductor, simultaneous recording, potentiometer, solid state circuitry

ABSTRACT: By combining the automatic potentiometer EPP-09 with the electronic-pneumatic control instrument KEP-12U, an arrangement is obtained which permits simultaneous recording of electric conductivity, the Hall-effect, and thermal emf. A circuit diagram is given as well as the description of the specimen adapter similar to that described by O.V. Yemel'yanenko et al. in Priory\* i Tekhnika Eksperimenta #1 (1960). The apparatus was used for measurements on

Card 1/2

ACCESSION NR: AP4012596

TiSe in the temperature range from 80 to 570K. Some of the results were published in FTT, 2 #7 (1960). Appreciation is expressed to Prof. G.B. Abdullayev and Kl. M. Khalilov for their interest. Orig. art. has: 2 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: FH, GE

NO REF SOV: 005

OTHER: 000

Card 2/2

AKHUNDOV, G. A.; ABDULLAYEV, G. B.; GUSEYNOV, G. D.; MEKHTIYEV, R. F.; ALIYEVA, M. Kh.

"Preparation and investigation of A III B VI single crystals."

paper submitted for Intl Conf on Physics of Semiconductors, Paris, 19-24 Jul 64.

15150-65 FMT(1)/FMD(k)/FMT(m)/F/EWP(t)/FMT(b)/FMA(h) Pt. 6/Pch IJP(c)/  
SD(t)/FMD/AFWL/AS(m)-2 RIM/AT/EE/JG S/0233/64/000/003/0101/0114  
ACCESSION NR: AP4046258

AUTHOR: Akhundov, T. A.; Abdullayev, G. B.; Guseynova, G. D.; Mekhtiyev, R. F.; Aliyeva, H. Kh.; Guseynova, E. S.; Gasanov, I. A.

TITLE:  $Al_{1-x}B_xVI$  semiconductors

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 3, 1964, 107-114

TOPIC TAGS: semiconductor single crystal, gallium chalcogenide, indium selenide, thallium selenide, electrical property, photo electric property, optical property

ABSTRACT: Electrical, photoelectric, and optical properties of the following  $Al_{1-x}B_xVI$  semiconductor single crystals have been investigated: gallium sulfide, selenide, and telluride; indium selenide; and thallium selenide. Several useful properties were previously detected in these semiconductors. The temperature dependence of electrical conductivity, Hall constant, Hall mobility, and thermal emf were determined experimentally in p- and n- type  $TlSe$  single crystals grown by horizontal or vertical zone melting. The discrepancy between the experimental

Card 1/3

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ACCESSION NR: AP4046258

and theoretical value of the coefficient of thermal emf at low temperatures (below 160K) was explained as a phonon drag effect. The experimental temperature dependence of the phonon component of the thermal emf was found to be in good agreement with that calculated on the basis of the theory of the phonon drag effect in semiconductors of tetragonal symmetry. The basic electronic parameters of TlSe were calculated from experimental data. The spectral distribution of photoconductivity and fundamental optical absorption were determined at 300K in all five AlIIbVI crystals. Lux-ampere characteristics of intrinsic photoconductivity and its "slow" and "fast" components, as well as the temperature dependence of the "slow" photoconductivity decay, were determined in GaSe and TlSe crystals. The parameters of trapping levels for electrons and holes were calculated for both crystals. Considerable photosensitivity was detected in GaSe crystals in the region of extrinsic absorption (below 3μ), owing to the presence of three impurity levels. High-level photosensitivity was detected in both low-ohmic and high-ohmic samples of InSe. Light emission in the yellow and red ranges was observed in CuS, GaSe, InSe, and GaTe single crystals excited with electrons at room temperature. The

Card 2/3

L 15150-65

ACCESSION NR: AP4046258

crystals were grown from a melt by the slow-cooling method. Orig. art.  
has: 8 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 007

ENCL: 00

SUB CODE: 66

OTHER: 003

Card 3/3

ACCESSION NR: AP4013534

S/0181/64/006/002/0634/0636

AUTHORS: Guseynov, G. D.; Akhundov, G. A.

TITLE: Anisotropy of the electrical conductivity and the Hall Constant in p type TlSe

SOURCE: Fizika tverdogo tela, v. 6, no. 2. 1964, 634-636

TOPIC TAGS: electric conductivity, Hall constant, semiconductor, single crystal

ABSTRACT: These properties for a single direction have been discussed by several investigators, but the authors have examined the properties in single crystals of p-type TlSe for different directions. The temperature range investigated was from 80 to 573K. The authors have found that conductivity varies according to the crystallographic direction. The relations are shown graphically in Fig. 1 on the Enclosures. They found also that the Hall component is constant but differs for various crystallographic directions. This is shown graphically in Fig. 2. on the Enclosures. "The authors thank Professor G. B. Abdullayev for his constant interest in the work." Orig. art. has: 2 figures.

ASSOCIATION: Institut fiziki AN Az. SSR, Baku (Institute of Physics AN Az. SSR)

Card 1/4



ACCESSION NR: AP4013534

SUBMITTED: 05Aug63

DATE ACQ: 03Mar64

ENCL: 02

SUB CODE: EC,SS

NO REF SOV: 006

OTHER: 000

Card 2/4

ENCLOSURE: 01

ACCESSION NR: AP4013534

Fig. 1. Dependence of conductivity components in TlSe crystals on reciprocal temperature.

Curves 1 and 2 are for sample A, with

$\sigma_{11} = \sigma_{22} = 0.42 \text{ ohm}^{-1} \text{ cm}^{-1}$  and  $\sigma_{33} = 0.17$

$\text{ohm}^{-1} \text{ cm}^{-1}$  at room temperature; curves

3 and 4 for sample B, with  $\sigma_{11} = \sigma_{22} =$

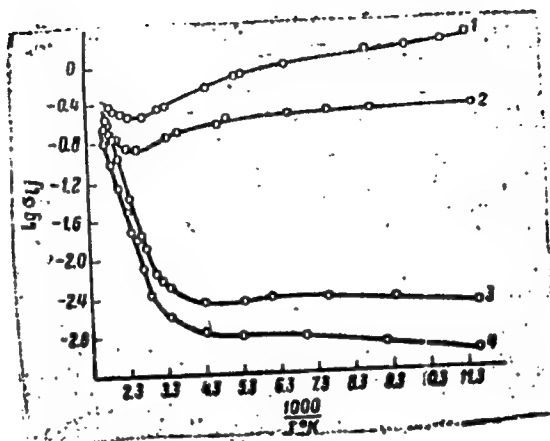
$4.8 \cdot 10^{-3} \text{ ohm}^{-1} \text{ cm}^{-1}$  and  $\sigma_{33} = 2.5 \cdot 10^{-3}$

$\text{ohm}^{-1} \text{ cm}^{-1}$ ; curves 1 and 3 are for

current density along  $[110]$ ,  $\sigma_{11}$ ;

2 and 4 for current density along

$[001]$ ,  $\sigma_{33}$ .



Card 3/4

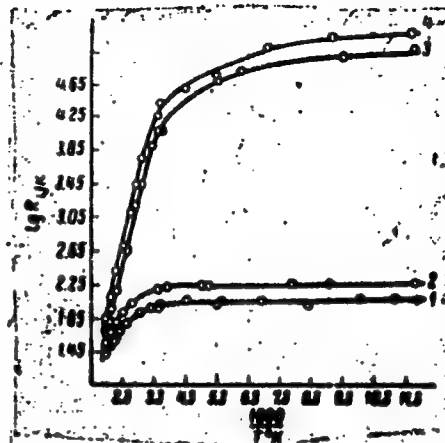
ACCESSION NR: AP4013534

ENCLOSURE: 02

Fig. 2. Temperature dependence of components of the Hall constant in crystals of TlSe. 1 and 2 are for sample A; 3 and 4 for B; 1 and 3 have the electrical field directed along  $[110]$ , the magnetic field along  $[001]$ ; 2 and 4 are for the opposite orientation;

hence, 1 and 3 give  $R_{110}^{001}$  and 2 and 4 give

$R_{001}^{110}$ , where the lower indices indicate current direction, the upper indicate magnetic direction.



Card 4/4

AKHUNDOV, G.A.; ABDULLAYEV, G.F.; GUSEYNOV, G.D.; MEKHEIYEV, R.F.; ALIYEVA,  
M.Kh.; GUSEYNOVA, E.S.; GASANOVA, I.A.

AIII<sup>B</sup>V<sup>1</sup> semiconductors. Izv. AN Azerb.SSR.Ser.fiz.-tekh.i mat. nauk  
no.3:107-114 '64. (MIRA 17:12)

L 8656-65 ENT(m)/EMP(m) LIP(a)/AENL/ESD(L)/RUCS(L) 200/20  
 ACCESSION NR: AP4044647 S/0048/64/028/008/1323/1327

AUTHOR: Guseynov, G. D.; Akhundov, G. A.; Aliyeva, M. Kh.;  
 Abdullayev, G. B.

TITLE: Electrophysical properties of thallium selenide single  
 crystals

SOURCE: AN SSSR. Izv. Seriya fizicheskaya, v. 28, no. 8, 1964,  
 1323-1327

TOPIC TAGS: thallium selenide, single crystal, semiconductor single  
 crystal, electrical property, photoelectric property, thermo-  
 electric property, crystal heat treatment

ABSTRACT: The purpose of the study was to prepare more perfect  
 thallium selenide (TlSe) single crystals and to establish the tem-  
 perature and carrier concentration dependence of their electrical  
 and photo- and thermoelectric properties. Indications are that  
 TlSe might find a use in selenium rectifiers, infrared sensors, x-  
 ray counters, and vitreous semiconductors. Large TlSe single crys-

Card 1/3

L 8656-65

ACCESSION NR: AP4044647

0

tals with an impurity concentration as low as  $6 \times 10^{13} \text{ cm}^{-3}$  were grown by multiple-pass zone crystallization. Electrical measurements show that the temperature dependence of the electric conductivity and Hall constant acquired a typically semiconductor, stable character only after prolonged heat treatment (annealing) of the samples. Also, the spectral distribution of photoconductivity was greatly affected by the heat treatment because of a decrease in hole concentration in the  $10^{17}$ – $10^{16} \text{ cm}^{-3}$  range, which corresponds to a change in the width of the forbidden gap from 0.88 to 0.67 eV. The sharp change in electrical and photoelectric characteristics of certain TlSe crystals caused by heat treatment is explained by creation of unstable acceptor centers (thermoacceptors) in the crystal growth process and their disappearance during heat treatment. Thermoacceptors are believed to result from thermal stress. This belief is confirmed by x-ray diffraction patterns. The thermal emf was measured in the 80–570K range in p- and n-type TlSe single crystals over a wide impurity concentration range. Thermal emf values considerably higher than theoretical were found below 160K in the high-resistance p- and n-type samples and were taken as an indication of

Card

2/3

L 8656-65

ACCESSION NR: AP4044647

the phonon drag effect. The latter effect was detected in both crystallographic directions of the tetragonal crystal, and was further substantiated by graphic comparison of the temperature dependence of the electronic and phonon tensor components of the thermal emf. Orig. art. has: 6 figures and 2 equations.

ASSOCIATION: none

SUBMITTED: 00

ATD PRESS: 3111

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SUB CODE: IC,SS

NO REF SOV: 010

OTHER: 003

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L 59486-65 EWT(1)/EWT(m)/EG(m)/EP(b)/T/EM(d)/EP(w)/EP(t) IJP(c) RIM/JD  
ACCESSION NR: AP5011792 UR/0249/65/021/001/0008/0013

AUTHORS: Guseynov, G. D.; Akhundov, G. A.

TITLE: Anisotropy of the electric properties of single-crystal  
p-TlSe

SOURCE: AN AzerbSSR. Doklady, v. 21, no. 1, 1965, 8-13

TOPIC TAGS: anisotropy, resistivity, Hall constant, Brillouin zone,  
galvanomagnetic property, thallium selenide

ABSTRACT: The authors have measured the electric conductivity and the Hall effect of p-TlSe in different directions of two typical crystals having different impurity concentrations and different resistivities. The results show that in the crystal with the lower resistivity, at low temperatures, the Hall-effect components are constant but have different values in different crystallographic directions. These components decrease when the temperature rises above 340K. For the other crystal, these components decrease with increasing temperature, start-

Card 1/2



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ing with a lower value (220K). The conductivities are different in different crystallographic directions, but their temperature variations remain the same as functions of the direction. The results are interpreted from the point of view of the possible structure of Brillouin zones for the TlSe crystals. 'The authors are sincerely grateful to Professor G. B. Abdullayev for continuous interest in the work and for valuable advice.' This report was presented by Z. I. Khalilov. Original article has: 4 figures and 4 formulas

ASSOCIATION: Institut fiziki AN AzerbSSR (Institute of Physics, AzerbSSR)

SUBMITTED: 16Oct63

ENCL: 00

SUB CODE: SS, EM

NR REF SOV: 005

OTHER: 000

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2/2

ACC NR: AT7003000

(A)

SOURCE CODE: UR/0000/66/000/000/0179/0182

AUTHOR: Mamedov, K. K.; Kerimov, I. G.; Kostryukov, V. N.; Guseynov, G. D.

ORG: none

TITLE: Specific heat and entropy of indium monoselenide at low temperatures

SOURCE: AN BSSR. Institut fiziki tverdogo tela i poluprovodnikov. Khimicheskaya svyaz' v poluprovodnikakh i termodinamika (Chemical bond in semiconductors and thermodynamics). Minsk, Nauka i tekhnika, 1966, 179-182

TOPIC TAGS: indium compound, selenide, specific heat, enthalpy, entropy, low temperature research, semiconducting material, chemical bonding

ABSTRACT: In view of lack of investigations on semiconducting compounds of the III - VI type, the authors measured the specific heat of indium selenide, which was shown by earlier experiments to have certain singularities in the structure and character of its chemical bonds. The temperature dependence of the specific heat was measured with an adiabatic calorimetric setup similar to that described earlier (P. G. Strelkov et al., ZhFKh v. 28, no. 3, 459, 1954). The preparation of the sample and the measurement procedure are described in some detail. The specific heats measured for 89 values of the temperature fell all (within one per cent) on a smooth curve, thus indicating the absence of phase transitions or anomalies in the specific heat of this compound in the investigated temperature range (50 - 300K). A table of the values of the entropy and enthalpy, obtained on the basis of the measurement results, is also

Card 1/2

UDC: 541.57

ACC NR: AT7003880

presented. Orig. art. has: 1 figure, 2 formulas, and 2 tables.

SUB CODE: 20/  
07/ SUBM DATE: 20Aug66/ ORIG REF: 008/ OTH REF: 004

Card 2/2

MEYNO, I. A.

Application of Ionomphoresis By Penicillin in the Case of Suppurative  
Otitis.

VOYENNO-MEDITSINSKIY ZHURNAL (MILITARY MEDICAL JOURNAL) No 12, 1954. p. 62